

### REMARKS

Claims 1, 2, and 13-22 are currently pending in the present application. No new matter has been added by way of the present submission. For instance, claims 1 and 2 have been amended to define the conditions of the finish rolling and the minimum rolling interval time as supported by the present specification, for instance, illustrative reference is made to Table 2, in particular, Table 2(1), No. 4, Steel C, Table 2(2), No. 2, Steel A, Table 2(2), No. 13, Steel H and Figure 3. New claims 21 and 22 are supported by the present specification at page 16, lines 14-32. Thus, no new matter has been added.

In view of the following remarks, the Examiner is respectfully requested to withdraw all rejections and allow the currently pending claims.

#### Issue under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 112, first paragraph for the reasons recited at pages 2-3 of the outstanding Office Action. Applicants respectfully traverse.

Applicants submit that this rejection is rendered moot due to the insertion of the minimum value of S of 0.1 seconds as suggested by the Examiner. Reconsideration and withdrawal thereof are respectfully requested.

#### Issue Under 35 U.S.C. § 103(a)

Claims 1, 2, and 13-20 stand rejected under 35 U.S.C. § 103(a) as unpatentable to the English machine translation of JP '914, in view of the English machine translation of JP '075.

Applicants point out that claim 1 has been amended to define the upper limit of CPT1 as being 0.97. Claim 2 has been amended to define the upper limit of CPT2 as 0.98. Although the Examiner alleges that the prior art exhibits a CPT1 value of 1.05, and a CPT2 value of 1.05, the

prior art fails as a whole to suggest or disclose the presently claimed upper limits of 0.97 (claim 1) and 0.98 (claim 2). There is no reason to modify the various parameters to arrive at the presently claimed CPT1 and CPT2 values. As such, Applicants submit that there exists no obviousness for claim 1 or claim 2. Claims 13-20 are dependent thereon and are thus likewise allowable.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The Supreme Court of the United States has held that the teaching, suggestion, motivation test is a valid test for obviousness, but one which cannot be too rigidly applied. See *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (U.S. 2007). The Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*, *ibid.*, reaffirmed the *Graham* factors in the determination of obviousness under 35 U.S.C. § 103(a). The four factual inquiries under *Graham* are:

- (a) determining the scope and contents of the prior art;

- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating evidence of secondary consideration.

*Graham v. John Deere*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (U.S. 1966).

The Court in *KSR Int'l Co. v. Teleflex, Inc.*, *supra*, did not totally reject the use of "teaching, suggestion, or motivation" as a factor in the obviousness analysis. Rather, the Court recognized that a showing of "teaching, suggestion, or motivation" to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a).

Even so, the Court in *KSR Int'l Co. v. Teleflex, Inc.*, *ibid.*, rejected a rigid application of the "teaching, suggestion, or motivation" (TSM) test, which required a showing of some teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the prior art elements in the manner claimed in the application or patent before holding the claimed subject matter to be obvious.

Further, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336, quoted with approval in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

In the present instance the cited art fails as a whole to suggest or disclose the CPT1 and CPT2 values as required by claim 1 and claim 2, respectively. There is no rationale to modify the many parameters in the prior art to arrive at such values. At most it might hypothetically be “obvious to try” different parameters. However, the present facts do not allow for such an “obvious to try” rationale to support a *prima facie* case of obviousness.

The issue of “obvious to try” was recently revisited by the Federal Circuit in *In re Kubin* (2008-1184, decided April 3, 2009). The court highlighted an earlier decision of *In re O’Farrell*, 853 F.2d 894 (Fed. Cir. 1988), where it was cautioned that “obvious to try” is an incantation whose meaning is often misunderstood:

It is true that this court and its predecessors have repeatedly emphasized that “obvious to try” is not the standard under § 103. However, the meaning of this maxim is sometimes lost. Any invention that would in fact have been obvious under § 103 would also have been, in a sense, obvious to try. The question is: when is an invention that was obvious to try nevertheless nonobvious?

*In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).

The Federal Circuit held in *In re Kubin* that to differentiate between proper and improper applications of “obvious to try,” it is necessary to understand two classes of situations where “obvious to try” is erroneously equated with obviousness under § 103. In the first class of cases,

what would have been “obvious to try” would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful.

*Id.* In such circumstances, where a defendant merely throws metaphorical darts at a board filled with combinatorial prior art possibilities, courts should not succumb to hindsight claims of obviousness. The inverse of this proposition is succinctly encapsulated by the Supreme Court’s

statement in *KSR* that where a skilled artisan merely pursues “known options” from a “finite number of identified, predictable solutions,” obviousness under § 103 arises. 550 U.S. at 421.

The second class of *O’Farrell*’s impermissible “obvious to try” situations occurs where what was “obvious to try” was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it.

853 F.2d at 903. Again, *KSR* affirmed the logical inverse of this statement by stating that § 103 bars patentability unless “the improvement is more than the predictable use of prior art elements according to their established functions.” 550 U.S. at 417.

In the present instance, Applicants submit that any attempt to rationalize arriving at the present requirements of CPT1 and CPT2 would amount to an impermissible “obvious to try” analysis. Nowhere in the prior art is the particular requirements that result in the claimed CPT1 or CPT2 ever discussed. While such a combination might hypothetically be possible, it would only amount to the throwing of metaphorical darts at a board filled with combinatorial prior art possibilities. This is the first of the two common “obvious to try” pitfalls decidedly admonished by the Federal Circuit.

As such, Applicants submit that the outstanding rejection is improper and must be withdrawn.

#### New claims 21 and 22

New claims 21 and 22 define the Zr content of the rails as 0.0001 to 0.2000 mass%. However, neither JP ‘914 nor JP ‘075 suggest or disclose the incorporation of Zr in these claimed amounts. This represents an additional distinction between the present invention and the cited art.


In view of the above, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie, Reg. No. 42,874, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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